Attorney's Docket No.: 13681-003002

Applicant: Augustine M. K. Choi et al.

Serial No.: 10/053,535 Filed: January 15, 2002

Page : 2

identifying a patient suffering from a disorder secondary to or resulting in oxidative stress; and

administering to the patient an effective amount of a composition comprising carbon monoxide, wherein the disorder is selected from the group consisting of: emphysema, bronchitis, adult respiratory distress syndrome, cystic fibrosis, pneumonia, interstitial lung disease, primary pulmonary hypertension, secondary pulmonary hypertension, Parkinson's disease and Alzheimer's disease.

- 43. The method of claim 42, wherein the disorder is emphysema.
- 44. The method of claim 42, wherein the disorder is bronchitis.
- 45. The method of claim 42, wherein the disorder is cystic fibrosis.
- 46. The method of claim 42, wherein the disorder is pneumonia.
- 47. The method of claim 42, wherein the disorder is interstitial lung disease.
- 48. The method of claim 42, wherein the disorder is Parkinson's disease.
- 49. The method of claim 42, wherein the disorder is Alzheimer's disease.
- 50. The method of claim 42, wherein the disorder is adult respiratory distress syndrome.
- 51. The method of claim 42, wherein the disorder is primary pulmonary hypertension.
- 52. The method of claim 42, wherein the disorder is secondary pulmonary hypertension.
- 53. The method of claim 42, wherein the composition is administered as an inhaled gas.

Brust

Ø 004

Attorney's Docket No.: 13681-003002

Applicant: Augustine M. K. Choi et al.

Serial No.: 10/053,535 Filed: January 15, 2002

Page: 3

54. The method of claim 53, wherein the gas is administered as a mixture comprising carbon monoxide, nitrogen and oxygen.

55. The method of claim 54, wherein the concentration of carbon monoxide in the mixture is monitored with a carbon monoxide analyzer.

56. The method of claim 42, wherein the patient is a human.

identifying a patient suffering from asthma; and administering to the patient an effective amount of a composition comprising carbon monoxide.

58. A method of treating asthma in a patient, comprising:
identifying a patient suffering from asthma; and
administering to the patient an effective amount of a composition comprising
carbon monoxide, wherein the composition comprises about 0.0001% to about 0.25%
carbon monoxide.

59. The method of claim 58, wherein the patient is a human.

60. A method of treating cancer in a patient, comprising:

identifying a patient suffering from cancer; and

administering to the patient an effective amount of a composition comprising
carbon monoxide, wherein the cancer is selected from a group consisting of: cancer of
the stomach, colon, rectum, liver, pancreas, lung, kidney, cervix uteri, corpus uteri, ovary,
prostate, testis, bladder, skin, brain/central nervous system, head, neck, mouth,
esophagus, larynx and pharynx; Hodgkins disease; non-Hodgkins leukemia; sarcoma;
choriocarcinoma; and lymphoma.

Bert

Applicant: Augustine M. K. Choi et al.

Serial No.: 10/053,535 Filed: January 15, 2002

Page : 4

Attorney's Docket No.: 13681-003002

61. A method of treating cancer in a human patient, comprising:

identifying a patient suffering from cancer; and
administering to the patient an effective amount of a composition comprising
carbon monoxide, to thereby treat cancer in the patient.

62. A method of treating inflammation in a patient, comprising:

identifying a patient suffering from inflammation of at least one organ selected from a group consisting of: kidney, brain, heart, liver, spleen, skin and lung; and administering to the patient an effective amount of a composition comprising carbon monoxide, wherein the inflammation is of a type selected from a group consisting

of: acute, allergic, alterative, atrophic, catarrhal, croupous, fibrinopurulent, fibrinous, immune, hyperplastic, proliferative, subacute, serous and serofibrinous inflammation.

63. A method of treating inflammation in a human patient, comprising:

identifying a human patient suffering from inflammation of at least one organ selected from a group consisting of: kidney, brain, heart, liver, spleen, skin and lung; and administering to the patient an effective amount of a composition comprising carbon monoxide, to thereby treat inflammation in the patient.

64. A method of treating inflammation in a patient, comprising:

identifying a patient suffering from or at risk of inflammation of at least one organ selected from the group consisting of: kidney, spleen and skin; and

administering to the patient an effective amount of a composition comprising carbon monoxide, to thereby treat inflammation in the patient.

65. A method of treating inflammation in a patient, comprising:

identifying a patient suffering from or at risk of sepsis; and administering to the patient a composition comprising carbon monoxide in an amount effective to reduce or prevent inflammation secondary to sepsis.

Ber

Attorney's Docket No.: 13681-003002

Applicant: Augustine M. K. Choi et al.

Serial No.: 10/053,535 : January 15, 2002

Page : 5

66. A method for promoting wound healing in a patient, comprising:

identifying a patient suffering from a wound; and administering to the patient an amount of carbon monoxide sufficient to promote wound healing in the patient.

67. A method of treating sepsis in a patient, comprising:

identifying a patient suffering from or at risk of sepsis; and administering to the patient a composition comprising carbon monoxide in an amount effective to treat sepsis in the patient.

68. A method of treating arthritis in a patient, comprising:

identifying a patient suffering from or at risk for arthritis; and administering to the patient a composition comprising carbon monoxide in an amount effective to treat arthritis in the patient.

69. A method of treating a patient to reduce oxidative stress associated with hyperoxia,

comprising:

identifying a patient suffering from or at risk for oxidative stress associated with

hyperoxia; and

administering to the patient a composition comprising carbon monoxide in an amount effective to reduce oxidative stress associated with hyperoxia.